

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-110933

(43)Date of publication of application : 20.04.2001

(51)Int.Cl.

H01L 23/12  
H01L 21/60

(21)Application number : 11-288446

(71)Applicant : NEC KYUSHU LTD

(22)Date of filing : 07.10.1999

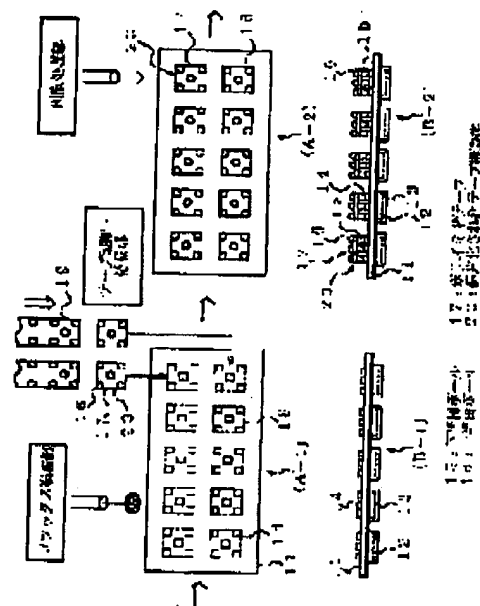
(72)Inventor : KIMURA NAOTO

## (54) SOLDER BALL MOUNTER AND SEMICONDUCTOR DEVICE

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a solder ball mouter for less failure in mounting a solder ball while quick mounting is allowed, and to provide a semiconductor device suitable for variation in product types.

**SOLUTION:** A plurality of first solder balls 15 are formed on one main surface side of an insulating tape 17 while a plurality of second solder balls 16 electrically connected to the first solder balls 15 are formed on the other main surface side, providing a tape structure body 20. The whole tape structure body 20 is mounted on a plurality of electrode pads 14 of an insulating substrate 11.



## LEGAL STATUS

[Date of request for examination]

05.09.2000

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

3408473

[Date of registration]

14.03.2003

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]